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| ***7. Measures***  Measures should coincide with Objectives and be measurable. | | | | |
|  | ***7a. Measures*** | ***7b. Current Results*** | ***7c. Target Results*** | ***7d. Actual Results*** |
| 1 | MRB Dollars | $24,975 | $18,731 | $8,754 |
| 2 | # of MRB Occurrences | 11 | 8 | 10 |
| 3 | Average Run Time of Defects | 29 hours | 22 hours | 8.6 hours |
| 4 | Quantity of Parts placed on MRB | 344,145 | 258,000 | 75,542 |

***2. Owner: Steven Pax – Value Stream Manager for Cleanroom 1, Nolato Contour – Industry Partner***

***1. Project Plan:*  *Visual Defects Reduction in Cleanroom 1 Value Stream***

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| ***3. Problem Statement*** *(What is unacceptable with the current situation?)* |
| The last 6 months in Cleanroom 1, there has been an increase in issues with operations personnel following the process for detecting visuals, which has led to non-conformances. |
| ***4. Scope*** *(What is included and/or now included in the project?)* |
| This project includes the visual inspection process for Team Leads, Technicians, and Production Operators inside the Cleanroom 1 Value Stream at Nolato Contour. It does not include the inspection performed by Quality Inspectors. The data metrics associated with measuring this project’s success are Material Review Board (MRB) dollars, number of visuals-related MRB occurrences, average run time that defects were being produced, and the quantity of parts placed onto MRB. |

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| ***5. Objectives*** *(Objectives should coincide with problems. Include quantitative goals. ie. %)* |
| 1. 25% Reduction of Material Review Board (MRB) dollars  2. 25% Reduction of Number of Visual Defect-related MRB Occurrences  3. 25% Reduction of Average Time Period that Visual Defects were produced before being detected  4. 25% Reduction of Quantity of Parts placed onto MRB  5. Creation of a standardized work procedure for visual inspections |
| ***6. Current Condition*** *(What is the current situation? Display your thinking in this box)* |
| The increase in issues with value stream personnel not following the visuals process has created many non-conformances and led to customer returns. The group culture around the visuals process is as follows, “We know our procedure says we need to look for these defects at a certain frequency, but we each have our own way that works and we only look at the parts if something sticks out to us. It’s the Quality department’s job to catch quality issues with the parts.”.  This is unacceptable thinking, but it’s the thinking and behavior that floor leadership has allowed. At the start of this A3 Project, the value stream was at a point where some informal training, and most of the tools required to do a proper visual training were in place. However, there wasn’t a set standard that everyone was following. It was more like having the best operators from each shift talk about what type of defects can happen to an injection-molded part and maybe show an example or two of each defect discussed during the first couple days of a new employee’s training.  Once a defect was caught, it would not be a surprise if that defect had been there since the beginning of the work order and blame was shed onto the tool, previous shift, other departments, etc. |

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| ***8. Implementation Plan*** *(List of major steps required to complete the project)* | | | | | | | | | | | | | | | |
|  | Dates | 2/17 | 2/24 | 3/2 | 3/9 | 3/16 | 3/23 | 3/30 | 4/6 | 4/13 | 4/20 | 4/27 | 5/4 |  | Responsible |
| 1 | Train techs and TL’s | X |  |  |  |  |  |  |  |  |  |  |  |  | Steven |
| 2 | Train operators | X |  |  |  |  |  |  |  |  |  |  |  |  | Team Leads |
| 3 | Check on techs/TLs |  |  | X |  |  |  |  |  |  |  |  |  |  | Steven |
| 4 | Check on operators |  |  | X |  |  |  |  |  |  |  |  |  |  | Team Leads |
| 5 | Create off shift audit |  |  | X |  |  |  |  |  |  |  |  |  |  | Steven |
| 6 | Train TLs to audit |  |  | X |  |  |  |  |  |  |  |  |  |  | Steven |
| 7 | Analyze current data |  |  | X |  |  |  |  |  |  |  |  |  |  | Steven |
| 8 | Establish targets |  |  | X |  |  |  |  |  |  |  |  |  |  | Team Leads |
| 9 | Post metrics to board |  |  |  | X |  |  |  |  |  |  |  |  |  | Steven |
| 10 | Do off shift audits |  |  |  |  |  | X |  |  |  |  |  |  |  | Steven |
| 11 | Evaluate actuals |  |  |  |  |  |  |  |  |  |  |  | X |  | Steven |
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***10. Functional Approvals:***

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| ***9. Future Condition*** *(What would we like things to look like in the future)* |
| Standardizations/Follow Up   * Train to Visuals TWI method during 1st week of new employee training * Visuals TWI method placed in accessible location * New metric created and maintained at the daily management boards * Team Lead does a weekly Gemba with everyone on his/her crew.  If operator can successfully list the 6 steps to the visuals process, they will receive a laminated cheat sheet card that they can tuck into their badge holder.  This will be an indication of who “is an expert” and who needs coaching yet.  At that point, the same process of weekly Gemba Walk’s turning into a “certification” via the cheat sheet card will only be needed for new people.  Also, every time an occurrence is added to the Visuals MRB metric, it would be a requirement to coach and confirm all operators that missed the defect are following the visuals process appropriately. |

***11. Team Members & Role: Jen Potvin – Team Lead, Jacob Rider – Team Lead***